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Citation for published version:

Guerrero C, J & Martin, C 2021, 'Ephemeral infrastructures of drug smuggling mobilities', *Contemporary Drug Problems*. <https://doi.org/10.1177/00914509211045598>

Digital Object Identifier (DOI):

[10.1177/00914509211045598](https://doi.org/10.1177/00914509211045598)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Published In:

Contemporary Drug Problems

Publisher Rights Statement:

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Ephemeral Infrastructures of Drug Smuggling Mobilities

Abstract:

The study of drug smuggling has often taken an organizational perspective whereby the structures of how smuggling is constituted predominate. Building on a growing body of scholarship addressing the networked complexities of drug smuggling this article considers the importance of distinct infrastructural arrangements. Its primary focus is on the materiality of drug smuggling infrastructures, and how the social, spatial and temporal qualities of these configurations overlap with licit mobility infrastructures, including intersections of visibility/invisibility, stability, and permanence. The core conceptual premise, drawn from Science and Technology Studies, is that drug smuggling mobilities are formed of ephemeral infrastructures that exhibit temporary, short-lived stability and permanence through the subversion of licit infrastructural configurations. Drawing on material from El Dorado Airport, Colombia, the paper examines the everyday artefacts which constitute these ephemeral infrastructures.

Keywords:

Ephemeral infrastructures; drug smuggling; mobilities; infrastructure studies; airports

Introduction

There is no doubt that since Star (1999) issued her call for the study of ‘boring things,’ namely the mundane issue of infrastructure, a broad range of scholars from a wide array of disciplinary backgrounds, including geographers, anthropologists, and scholars in Science and Technology Studies (STS) have established the study of infrastructure as an object for the social sciences in its own right. On the other hand, scholarly interest in drug trafficking already has a long tradition within several disciplines, including social and economic history, criminology, sociology, anthropology, political sciences, law, and a foothold in what Gootenberg (2005) terms ‘drug studies.’ However, until recently, the two branches of scholarship have seldom crossed paths.

Whilst scholars such as Decker and Chapman (2008) have provided in-depth accounts of smugglers’ tactics and the wider processes of creating illicit supply chains, others, including Martin (2019) and Guerrero C (2019) have addressed the infrastructural dimensions of smuggling from a socio-material perspective. In this article, we offer new insights into infrastructural readings of drug smuggling by addressing the *temporal* dimensions of such practices in combination with materialist perspectives. We utilize the concept of ephemerality to differentiate the infrastructures of drug smuggling from those of licit infrastructural formations where their socio-material configurations are created on a permanent basis through both stability and embeddedness. In contrast, the article argues that drug smuggling infrastructures have the ability to move in and out of embeddedness on a temporary basis, whereby the mobility of illicit drugs rests on arrangements that are ephemeral because they rely on harnessing licit infrastructural mobility. We highlight the co-productive relations between the short-lived infrastructural

configurations of licit tourist mobilities and the security of infrastructures. Different from other semi-permanent infrastructures of drug mobilities, such as makeshift dockyards and airstrips, the short-lived infrastructural configurations of the mobilities of illicit drugs through the hyper-securitized space of the airport is composed of the bodies of drug mules alongside adapted tourist artefacts such as luggage.

Although studies of networked organized crime tend to be well developed to analyze the roles and character of current organized crime (Kenney, 2007; Williams, 2001), the materialities of smuggling have remained somewhat black-boxed. More than attending to the dynamics of specific networks, this article adopts a network ontology approach that aims to transcend the dualisms of criminological literature such as local/global, legal/illegal, and human/non-human actors (Hall, 2018). As such the networks (made up of people and things) are performative. That is, their stability is only the result of the constant work of a vast array of actors. Power does not emanate from specific actors rather from the circulation of relationships (Latour, 2005). In this vein, Abraham and van Schendel (2005) have already shown the overlap between the legal and illegal in movements considered illegal, and Lupsha (1981) has investigated legal businesses' connections with various forms of criminality. However, although they describe the complex dynamics in criminal organizations and illuminate their socio-economic characteristics and certain structural qualities, they leave out the more situated, local and material experiences of how these organizations act. This article engages with these aspects.

We develop our argument by providing a temporal-material reading of drug mobilities, connecting different strands of literature, including STS readings of materiality and

infrastructure and geographies of the illicit and organized crime. We also employ discourses from 'the mobilities turn' and reflections on the material character of different mobilities (Hannam et al., 2006; Urry, 2007). As a case study we analyze the material arrangements involved in attempts to transport drugs using commercial airlines from El Dorado airport in Bogotá (Colombia) in order to demonstrate the materialities of drug trafficking. Mobility studies have focused mostly on legal mobilities, there are incursions on how various forms of mobility, legal and illegal, are intertwined (Martin, 2015, 2019). Likewise, several contributions have emphasized the socio-technical systems configured as forms of control and classification of legal and illegal flows (Adey, 2004; Sheller, 2010). Cohen et al., (2017) have been more specific still in developing what they call 'subversive mobilities'. They discuss the need to open the 'black box' on the ways artifacts are integrated into these networks. Similarly, Bess and Enciso (2017) propose the study of 'drug mobilities' to understand the convergences of movement, technology, and organizational control for mobility studies and transport history, with the scholarship on the drugs trade. Likewise, Urry (2005) argues for the importance of the movement of illegal or clandestine things in understanding mobilities. Together these intersecting and overlapping mobilities help shape the economic and political dynamics of the contemporary world (Martin, 2015, 2019; Nordstrom, 2007).

The airport itself has been an important site for such studies as well as producing debates about airport security technology's political and social aspects in addition to the co-construction of such technologies. This literature recognizes both the material element of security concerns and highlights the importance of materiality, but seldom does it engage with the objects, people, and materials considered security threats, inter

alia, the smuggler. The emphasis on the material aspects of drug trafficking through a combination of the theoretical propositions of mobility studies, infrastructure studies, and STS allows us to move from the excessive focus on organizational arrangements common in the explanation of drug trafficking, that still rely on the tropes of 'cartels' and 'syndicates' (see Reuter & Paoli, 2020; Tonry & Reuter, 2020) and instead address the distinct materialities of infrastructural arrangements. Finally, the paper engages the literature on illicit flows where the contrast between forms of visibility and invisibility is also more evident. While the state makes efforts to achieve visibility and guarantee territorial sovereignty, traffickers seek to remain invisible (Abraham & van Schendel, 2005).

In section one we discuss the turn to the materialities of infrastructure and specifically contributions from the STS literature. STS as a field has demonstrated the interplay between Science, Technology and Security (Evans et al., 2020; Vogel et al., 2017) and specifically Actor Network Theory has been utilized to explore issues related to security, flagging the mutual constitution of security assemblages, including the contested role of technology and security threats (Andersson, 2015; Braun et al., 2019;). The second section accounts for the theoretical affinity between, STS, infrastructural studies and the new mobilities paradigm. Here the core arguments on infrastructural arrangements are developed, the intention being to identify the key traits of large-scale infrastructure, namely: visibility and invisibility; permanence; embeddedness; and maintenance. Section three presents an overview of the drug smuggling mobilities. In section four we develop our positioning of the ephemeral infrastructure of drug smuggling and how they relate the conditions of large-scale licit infrastructure, deploying similar traits albeit for

short-lived periods of time. Section five offers a more empirically grounded outline through a consideration of drug smuggling encounters at El Dorado Airport, Colombia. We look at the actions of the so-called *pasantes* or 'drug mules' and at the mundane objects (such as luggage). In the Conclusion we summarize the value of analyzing the ephemeral infrastructures of drug smuggling so as to understand illicit mobility flows.

Methodologically, the article draws on ethnographic observation alongside semi-structured and in-depth interviews with members of the Colombian Police at El Dorado Airport. The article combines these social research methods with broader STS theories, explicitly with the biographies of technologies and practices (BoTP) (Hyysalo et al., 2018), in our attempt to follow the movement of illicit drugs. The article is based on fieldwork undertaken by one of the authors between 2014 and 2015, and interviews with anti-narcotics personnel between 2017 and 2018. The co-author carried out fieldwork at CIENA, the Center for intelligence and Analysis of the Colombian Antinarcotic Police, the offices of which are within the premises of El Dorado Airport. The researcher was provided with access to the annex building where suspicious cargo is sorted and allowed to shadow police personnel when surveying passengers at the first check in point in the airport, and to observe the work of the police in charge of the early judicialization of the *pasantes*. The interviews and fieldwork were analyzed using a coding scheme developed during data collection. Given our interest in the engagements of both drug smugglers and Colombian Police with the infrastructural dimensions of drug trafficking there is an inevitable messy quality to such overlaps, so to deal with this we have focused on the binary practices/technologies deployed in the mobilities of drug trafficking. We recognize that in doing so we focus our attention on the 'unsuccessful'

drug smuggler, but this also reveals the materiality of such practices. The appearance and disappearance of the materials used for the transportation of drugs from our data (interviews, documents, statistics, observations), allowed us to problematize and develop our main hypothesis, chiefly the ephemeral character of the infrastructures of drug smuggling.

1. STS and Infrastructural materialities

STS as a discipline is focused on the production and maintenance of technological artifacts. STS bridges the distinction between the 'social' and the 'technical,' studying the interconnectedness between them, using the language of co-production (Jasanoff, 2004), social construction (Pinch & Bijker, 1984) and mutual shaping (MacKenzie & Wajcman, 1999). Several strands within STS deal directly with infrastructures where they are understood as sociotechnical assemblages, revealing they are more than purely technical constructs. Since the mid-1990s, STS scholars have presented infrastructures as layered, complex, changing, modular increments, and in constant negotiation with other system aspects (Star & Ruhleder, 1996). STS has demonstrated the paradoxical condition of infrastructure. Highly immobile infrastructures such as airports, or roads aimed at facilitating large scale movements are at the same time highly local and intimate; that is, rigid but also requiring softer human skills, competencies, and expectations (Howe et al., 2016).

While different STS strands have engaged with materiality, actor-network theory (ANT) associated with Bruno Latour, Michell Callon, and John Law is the version of STS that provides the most complete set of conceptual and methodological tools to deal with

materiality. Actor-network theory is preoccupied with how materials and meanings are interwoven, and how realities only exist in practices: to ANT materiality is inseparable from its practices (Law, 2012). Materiality is understood as a relational effect, where “knowledge and realities are being *continuously* enacted or performed” (Law, 2012, p. 179). ANT scholars trace how the stability of the material is achieved through the continuous work of actors assembling heterogeneous networks composed of discursive, institutional, technological materials. In consequence, part of the scholarly endeavor reveals how the particular material assemblages are made detectable (Law, 2012, p. 173).

As we go on to suggest we are interested in the constitutive effects between the infrastructures of drug smuggling and the airport and its security infrastructure. In doing so, we move away from explanations that consider the technologies used by drug smugglers as resources to be deployed according to their efficiency, for, as STS reminds us, different aspects of problems are given priority and particular solutions “rendered thinkable” (Beck et al., 2017, p. 1064). Our focus then is not on any specific salient technology, rather, under the auspices of what we term ephemeral infrastructures, the semi-stable arrangements that produce drug smuggling materialities.

Overarchingly, there is one particular analytical insight from STS/ANT that we consider specifically relevant for the study of drug trafficking networks. Despite the constant work and planning involved in the development of legal infrastructure, they are always a work in progress, always in continuous negotiation. As such infrastructural stability is constantly strived for through an ongoing process of ongoing dialogue with instability. In

dialogue with this we argue that the ephemerality of drug smuggling infrastructures creates a transitory, quasi-stable state of affairs.

2. The mobility of infrastructural arrangements

As with infrastructures, the social sciences have often dealt with mobility as a black box (Sheller & Urry, 2006, p. 208). To the mobilities paradigm, mobility implies immobile infrastructures that facilitate or impede movement (Cook & Butz, 2016; Hannam et al., 2006, p. 11). To be sure, there is no mobility without systems of immobility. Mobility is always located and materializes through the rearrangement of places. The infrastructures that facilitate or impede mobility are subject to a set of feedback mechanisms and are, according to the mobilities paradigm, the result of a combination of objects, technologies, and socialities that produce patterned relationships. In short, infrastructures of mobility are materially heterogeneous sociotechnical systems, which possess emergent properties that should be studied as hybrids in all their complexity.

For our argument there are four key determinants that constitute the spatial, temporal and material qualities of large-scale infrastructural forms: (in)visibility; permanence; embeddedness; and background work. Using these key tropes our intention is to establish how they form the ontological configuration of infrastructure, as well as the ground upon which we articulate our central premise of the ‘ephemeral infrastructures’ of drug smuggling.

We begin with perhaps a key point for our argument – the intersection of visibility and invisibility. Star’s (1999) seminal work on infrastructures provides an array of important contexts for their study, not least the metaphorical notion of infrastructure’s ‘buried’

qualities. Part of the mundanity of infrastructure, its seemingly boring nature, results from being apparently invisible (Star & Ruhleder, 1996). For Law infrastructure elicits the question of how we engage with that which “lies beneath the social surface?” (Law, 1991, p. 10-11). Partly as a result of infrastructure’s buried qualities it has been taken-for-granted, whereby it remains invisible and black-boxed (Graham & Thrift, 2007, p. 10; Star & Ruhleder, 1996, p. 112). This invisible quality of infrastructure stems in part from usage, when infrastructures work, they are ostensibly invisible, only when they fail and breakdown do they become visible (Star, 1999, p. 382). However, Dourish and Bell (2007), and Dodge and Kitchin (2004) have argued that the question of invisibility is contextual or relational. That is, it is dependent on both the nature of the infrastructure itself but also who is using it. To circle back to Leigh Star’s assertion, it is once again dependent on who is using the infrastructure. It is clear then that a straightforward binary separation of invisible or visible is doubtful. Above all, we concur with Larkin’s observation that “invisibility is certainly one aspect of infrastructure, but it is only one and at the extreme edge of a range of visibilities that move from unseen to grand spectacles and everything in between” (Larkin, 2013, p. 335). The notion of material and temporal permanence we associate with large scale infrastructure is again relational. That is, permanence and stability depend upon a vast array of actors to instantiate longevity. As Graham and Marvin (2001, p. 182) highlight, there is a huge amount of background work undertaken to create the veneer of permanence and fixity. Employing the term ‘precarious achievements’ Graham and Marvin go on to articulate how dynamic the process is of maintaining the operation of networks, so that they remain *perceivably* stable, fixed and permanent.

A similar argument is true when we consider the role of embeddedness. Taking our cue once again from Leigh Star's work, infrastructure is said to be embedded within and alongside other infrastructures, "social arrangements, and technologies" (Star, 1999, p. 381). Critical to this notion of embeddedness is that constituent elements of infrastructure are nested in place, fixed together as part of a stable assemblage. Employing the analogy of water infrastructure, we could argue that the pipework is embedded within the wider socio-technical network. In this image the notion of fixity is alluring for we understandably perceive the pipework as a stable entity embedded alongside other key elements such as pumps, filtration units, etc. The attraction of such images comes in part from the materiality of these infrastructural forms, what Graham and Thrift (2007, p. 10) describe as "hard technologies". This is why infrastructural embeddedness is often discussed in parallel with permanency. Two interrelated material and temporal factors emerge: firstly, the materiality of infrastructure (its hardness) creates a sense of permanence and material resilience; secondly, the persistence of infrastructural longevity over time is promoted.

To be sure, infrastructures operate through the conjunction of dynamic background work which maintains the appearance of stability and permanence, or what Adey describes as obduracy (Adey, 2006, p. 76). That is, there is a kind of stubborn, *enduring* quality to how we think of infrastructures as embedded sociotechnical systems. For example, in the case of large-scale transport infrastructures these are socio-technical platforms for the mobility of people and objects (Larkin, 2013), created through the intersection of both highly *mobile* and highly *immobile* infrastructures where mobility is produced by immobile infrastructural forms – think of the seeming fixity of road

networks. This blurs the distinctions between movement and materiality; fixity and fluidity. This blurring is acute in the study of transport infrastructures that include logistical supply chains (Birtchnell & Böhme, 2020; Birtchnell & Urry, 2015), securitization of mobility and global flows of people and things (Beauchamps et al., 2017; Leese & Wittendorp, 2018) and the intersection between migration studies and mobilities (Pooley, 2017; Thimm & Chaudhuri, 2019).

Much of the value of the new mobilities literature stems then from the recognition that mobilities are not solely concerned with movement, rather *how* movement is created by immobilities and the enduring qualities of the moorings which effectively configure movement (Hannam et al., 2006). So, just as large-scale infrastructure is relational, mobilities too are configured by heterogeneous assemblages, and the definition of infrastructure provided by Larkin – “infrastructures are matter that enable the movement of other matter” (Larkin, 2013, p. 329) – provides a conceptual bridge to understand infrastructure more generally as the mobilization of matter.

3. Drug smuggling mobilities

The differential nature of mobility as outlined in the new mobilities paradigm leads us onto the relationship between licit large-scale material infrastructures and the illicit infrastructures of drug trafficking. As with the coextensive nature of infrastructures discussed above, we argue that drug smuggling infrastructures are framed by parallel questions of visibility/invisibility, embeddedness, permanence and background maintenance. Central to this is the relationship between longevity and ephemerality: where licit infrastructural configurations are often determined by the strivance for

permanent operation through ongoing upkeep and maintenance, we recognize something distinct in the infrastructures of drug smuggling mobilities, namely their *temporary* configuration. But before beginning to unpack our notion of ‘ephemeral infrastructures’ of drug smuggling in the next section, we briefly discuss the larger-scale material infrastructures of drug smuggling.

The genealogy of drug smuggling is historically and geographically complex, with historians (Harvey, 2016) noting its inherent relationship with legal trade, as well as the politics of the time, including the case of the opium trade in the late 19th century and early 20th century where this once-legitimate commodity became illegal (Meyer and Parssinen, 1998, p. 2-4). Likewise, the imbrication of the licit and illicit is evident in the infrastructures of drug smuggling that are dependent on socio-material affordances of infrastructural technologies. In this context Martin (2019) suggests that the practices of smugglers fall into two categories. Firstly, shadow networks and supply chains; secondly, harnessing legitimate transportation networks and supply chains¹. These two differentiated strategies are dependent on infrastructural embeddedness and interdependencies.

With the former, shadow infrastructural arrangements are created that run parallel to licit infrastructures. For example, drug traffickers acquire vehicles and other devices on the legal market, such as boats, light aircraft, communication devices, which can be used with or without modifications. Go-fast boats were common in the 1980s for transporting

¹ Cohen et al., (2017) propose a roughly similar division, but they focus on defining mobility through consideration of independent and parasitic routes, rather than the infrastructural aspects of smuggling practices.

drugs from Colombia, the Bahamas and Cuba to the USA (Decker & Townsend Chapman, 2008, p. 69). In the 1990s different infrastructural arrangements were deployed through the use of private light aircraft which departed and landed on makeshift airstrips. Two further infrastructural innovations highlight the creation of shadow networks and supply chains. The creation of drug-tunnels running between Mexico and the USA have been relatively common in the last few years (Associated Press, 2016). In terms of technological innovation, the case of agile infrastructure in the form of the design and build of narco-submarines and fast boats is particularly striking (Guerrero C, 2020).

By no means mutually exclusive from the first, the second infrastructural formation outlined by Martin (2019) is the co-opting of existing licit infrastructures associated with commercial travel routes or the supply chains of global trade. Perhaps the most common of these is “piggybacking” (Basu, 2013, p. 316) on legitimate freight transportation networks, notably by concealing narcotics in intermodal shipping containers. Subversive tactics include the misrepresentation of the contents through false paperwork, or what is known as ‘double layering’, whereby shipments of narcotics are hidden behind consignments of legitimate freight. Cases of such tactical measures abound, but one brief example includes the seizure at the Port of Baltimore of USD \$10 million worth of cocaine hidden in black sports bags secreted inside a consignment of chairs (US Customs and Border Protection, 2019). In the case of utilizing commercial travel routes a similar process of piggybacking is apparent, most commonly with passengers or couriers smuggling drugs onboard scheduled commercial air routes, or other forms of transportation such as ferry services (see Caulkins et al., 2009).

4. Towards an ephemeral infrastructure of drug smuggling

Central to our conceptualization of the ephemeral infrastructures of drug smuggling mobilities is the transitory infrastructural arrangements in which drug smugglers align a disparate array of actors and systems to target the flow of drugs such as cocaine from production sites to consumers. Just as Xiang and Lindquist's explanation of migration mobilities suggests, "migration flows can be fragmented and *short-lived*, but infrastructure retains a particular stability and coherence" (Xiang & Lindquist, 2014, p. 132 our emphasis), we argue that drug smuggling mobilities are also stable and coherent, albeit for a shorter-lived period of time than regular mobilities, and, critically, that such stability is partly due to the ability to navigate in and out of embeddedness in legitimate infrastructures. A comparison with traditional logistics chains can help to visualize the argument more clearly. The logistics of trade flows rely on fixed departure and arrival times, where almost every movement is the result of control over movement, time, space and costs. These movements are sustained through infrastructural interconnectivity rendered functionally similar in different parts of the world, with incremental innovations over long periods. Levinson (2016) demonstrates the centrality of a technology, such as the shipping container, which has been central to the complex automated system of moving goods and services with stabilized forms of technological and systemic change. In this sense, licit goods and services follow more or less predictable, more or less stable routines over extended periods of time. We suggest that ephemeral infrastructures associated with drug smuggling lack the same predictability or ongoing stability; rather, by definition the transitory nature of ephemeral

infrastructures are temporary manifestations of embeddedness in legitimate mobility infrastructures.

In both categories of drug smuggling mobilities outlined above different forms of temporary embeddedness operate. For clandestine, shadow infrastructures, whilst they operate out of the spaces of licit socio-material practices they nonetheless are dependent on existing knowledge, skills, and crucially technologies and mobile infrastructure such as adapted automobiles or boats, alongside transitory infrastructural formations like rural airstrips for example. The embeddedness we speak of here is the temporary form of stability afforded by the co-opting of such socio-technical artefacts and infrastructures. The smugglers' tactics of piggybacking are likewise dependent on the existing material infrastructures of commercial supply chains or international travel, however there is something of a distinct temporality at work in these contexts. For whilst both systems of smuggling operate on a temporary basis--stable for briefer periods of time when compared with licit infrastructural configurations--their respective approaches to the socio-technologies means they act at different rates. In the case of drug smuggling tunnels for example, some estimates suggest that the cross-border tunnel developed to smuggle cocaine and marijuana between Tijuana and San Diego in 2016 may have been operative for approximately 1-year (Associated Press, 2016). The economic investment, labor and time taken to dig the tunnel and construct the elaborate infrastructure replete with rail system and elevator necessitates as long an operation period as possible, albeit until discovered by security authorities. By piggybacking on existing supply chains and travel routes, enmeshing large-scale infrastructural forms such as shipping containers, or the smaller-scale mundane objects of tourist mobilities,

drug smugglers deploy a different form of ephemeral infrastructure that moves in and out of embeddedness in a comparatively fragmented and short-lived timeframe.

As we will set out below, in the context of airports the ephemeral infrastructures of drug smuggling mobilities utilize the objects of tourist travel--adapted luggage, clothing, souvenirs--alongside using people's bodies as infrastructure through the prevalence of drug mules (Simone, 2004)². Such journeys are mediated by the ability of smugglers to harness the legitimate activities that produce aeromobilities (Cwerner et al., 2009), becoming embedded in the infrastructures of tourist travel for brief periods of time. By doing so, smugglers produce different infrastructural arrangements that rely upon the subversion of seemingly mundane objects of everyday travel which co-evolve according to the security mechanisms and the opportunities afforded by the airport and the distribution of resources within the smugglers' networks. In short, the ephemeral infrastructures of drug smuggling mobilities are short-lived stable arrangements to distribute cocaine by moving in and out of infrastructural embeddedness, thus producing short-lived invisibility in relation to airport security.

5. El Dorado Airport: a case study of the ephemeral infrastructures of drug smuggling

To provide an empirical unpacking of the ephemeral qualities of drug smuggling infrastructures, in this final section we focus on the case of drug trafficking within the context of aeromobilities, specifically El Dorado Airport in Bogotá, Colombia. We

² Drug mules or more precisely body-packers deserve a discussion in their own right, however, to note that body-packers secrete drugs within their bodies using prepared condoms or the fingers of latex gloves, which can be considered a specific type of smuggling technology (Fleetwood, 2014).

describe the ephemeral infrastructures of drug smuggling through the security apparatus of the airport's anti-narcotics police. Such security protocols and procedures in airports have been the subject of study in cognate disciplines, including surveillance studies, critical security studies, mobilities studies, and STS (see Salter, 2004). This literature recognizes both the material element of security and security concerns and highlights the importance of materiality in understanding security, however there is limited engagement with the objects, people, and materials that constitute the infrastructural arrangements of drug smuggling. We take the encounters of drug trafficking infrastructures within the airport to demonstrate the complexities of the material aspects of drug trafficking as it encounters the airport's hyper-securitized space. While security in the airport implies a continued sorting of people and objects (Kloppenburger, 2013; Schouten, 2014; Valkenburg & Van der Ploeg, 2015), of what is allowed or not to travel, as well as the standardization of surveillance practices, drug trafficking infrastructures rely upon the subversion of the seemingly mundane objects of everyday travel, facilitated by our key proposition of the temporary stability of ephemeral infrastructures.

El Dorado Airport is one of the largest airports in Latin America, with around 16,200 international travelers passing through the airport on a typical day, and nearly 6 million per year by 2019³. It employs circa 25,000 people, while approximately 102,000 people work in the aero industrial sector in Bogotá, 7% of total employment in the city. A private security company provides security in the airport, with more than 300 security agents controlling entry to the airport, together with an array of technologies, CCTV, metal

³ <https://eldorado.aero/comunicados/estadisticas-del-aeropuerto> (Retrieved, 2/2/21).

detectors, X-rays, biometric scanners. Nevertheless, drug trafficking has been a significant factor in shaping the security of El Dorado. Since the 1980s the airport has been a critical transit point for the transportation of cocaine, adding an extra layer of security composed of police frisking, profiling, body scanning, a bag holding system, narcotic detection dogs, and a 'reconciliation room'. In 2019, 249 persons were captured at El Dorado by the Colombian anti-narcotics police when trying to carry illicit drugs (mainly cocaine) overseas.⁴ The Colombian Police have deployed the *Compañía Antinarcóticos de Control Aeroportuario* with a dedicated unit inside El Dorado to detect suspicious passengers.

El Dorado Airport's security procedures begin when a passenger buys an airplane ticket; there are 'critical destinations' or 'red flag' countries and cities considered likely destinations for the arrival of illicit drugs⁵. As Salter (2004) has indicated, airport security implicates the pre-emption and categorization of people long before they enter the airport premises.⁶ The methods of how and where the ticket is purchased might signal a security concern; when and how the passenger acquired their passport; and the passenger's travel history. If provided by the airline, the combination of the previous

⁴ <https://www.elespectador.com/bogota/en-2019-cayeron-249-personas-por-narcotrafico-en-el-aeropuerto-el-dorado-article-897722/> (Retrieved, 30/12/19)

⁵ Critical destinations are defined by previous years' statistics, diplomatic exchanges, and intelligence information. In the field, often the phrase "wherever we might think they could be sending drugs" (mostly Europe) is used to define a critical destination.

⁶ Countries worldwide have launched different interventions to strengthen capacities to face the alleged increased capabilities of drug trafficking organizations to overcome airport security to control illicit drug flows. Notably, since 2010, UNODC, INTERPOL, and the World Customs Organizations (WCO) created the Aircop program "to detect and intercept drugs, other illicit goods, and high-risk passengers in both origin, transit, and destination countries with the overall objective of disrupting the illegal criminal networks" (<https://www.unodc.org/unodc/en/organized-crime/AIRCOP/1-aircop-home.html>, retrieved, 2/2/21). A similar process of security pre-emption has been in use in the maritime industry, specifically the US Customs and Border Protection agency's Container Security Initiative. Since its inception in 2002 the initiative pre-emptively screens shipping containers at their point of origin outwith US sovereign territory (see Office of Policy and Planning and Office of Internal Affairs, Container Security Division, 2006).

information is sifted and analyzed by the police looking for clues over which passengers are suspicious and should be questioned in more detail when they arrive at the airport. A second security layer is the deployment of police expertise in profiling, looking for critical signs of nervous behavior, details in the clothing, number of overhead compartments booked, and checked luggage, as well as the weight of luggage, and the use of stereotypes to filter those considered regular travelers and those who are not. Spotting suspicious behavior is done by police on the airport floor, or by police agents and airport security monitoring images from more than 700 cameras positioned around the airport. When the police believe a passenger is behaving suspiciously, they are approached either at the point of entry, or after the passport check and might be taken to a dedicated room with a BodyScan machine (BS 16), a machine that utilizes ionizing radiation to provide a full inspection of the passenger's body.⁷ Security at the airport is negotiated between the private security company, diverse companies of the National police, immigration agents, customs agents, and several other ministries.

The anti-narcotics company stationed at El Dorado Airport is one company out of twelve airports and port control of the Colombian National Police. The anti-narcotics police aim to anticipate the transit of illicit drugs throughout the airport, both at the smaller scale on commercial airplanes and at a much larger scale on cargo planes. When asked about the strategy's efficiency, some members of the police are quick to dismiss the results and affirm that for every person identified as carrying cocaine, the smugglers send at least one other; the captured usually serving as a decoy. Others consider that this type

⁷ According to the supplier, the BS 16 is an X-ray inspection equipment specifically developed for the inspection of people from head to toe in susceptible areas. It allows the detection of drugs, narcotics, contraband goods, weapons, explosives, hidden under clothing, inside prosthetics, or on the human body.

of experience plus the technologies have improved identification rates. Here it is worth considering the words of anti-narcotics agents in the airport concerning the strategies of drug organizations regarding the *pasantes*: “They care about the cargo, they do not care about the people...so they...send three 'mules,' and of those three, one is captured, so if they are losing too much, they will stop for some time and start again”⁸. The critical issue here is the body as part of the drug smuggling infrastructure and the encounter between such infrastructures and airport security. When a mule is identified the ephemeral, short-lived quality of the drug smuggling infrastructure becomes apparent, whereby the smuggling organizations pause their activities. The body of the *pasante* then reappears during anti-narcotics training: “Here the police personnel is taught to see the body, the whole body, how is the people dressed, what is the people doing, what looks at or not, the walking, the behavior, if there are doubts, if is talking or not, if the person is too timid or too brazen”⁹ As in any contemporary airport, the security in El Dorado Airport operates with a complex combination of new and old technologies, and the combination of visibility and invisibility. In the last decade, little has changed regarding the control of anti-narcotics, with the wide availability of 'Cocaine Drug Test Wipes' as one of the main innovations.¹⁰

Despite the wide-ranging sophistication of the security apparatus in use at El Dorado airport (and others) we propose that the drug smugglers’ actions can be understood as resulting from the ephemeral, short-lived character of the infrastructures they configure

⁸ Interview with anti-narcotics police commander at El Dorado airport, August 2015.

⁹ Interview with anti-narcotics police analyst, June 2017.

¹⁰ Interviews with non-commissioned officers with field experience in airport anti-narcotics control, August 2016, and October 2018

to transport drugs, a process that is highly dependent on the subversion of everyday objects which are designed in such a way to enable them to be moved in and out of embeddedness in the licit infrastructures of aeromobilities. Given our earlier point concerning, the use of small-scale mundane objects such as luggage or adapted vests used by *pasantes* also limits the amount of cocaine that can be transported. The anti-narcotics police attempt to identify micro transformations of mundane objects, sometimes carrying no more than 10 grams of cocaine. The concept of ephemeral infrastructures allows us to see the many micro-movements that uphold the movement of drugs from producers to consumers. Moving the cocaine from city to city, as well as moving the people and the artefacts, are highly dependent on the embeddedness of everyday mobility, as demonstrated by a *pasante* captured in El Dorado Airport:

“When I was captured, something different happened. The suitcases had always been made by people from Cali. On this occasion, the drug owner asked other people to make suitcases...people without experience that didn’t know if the suitcases would pass the airport filters. Since I saw the suitcase, I noticed that it was bigger and different...” (Quiceno et al., 2014, pp. 58-59 cited in Benítez et al., 2017, translation by authors).

As attested to in this quotation, when attempting to smuggle cocaine using the infrastructure of aeromobilities, the options open to smugglers are part of a longer genealogy: cocaine is transported through attachment to the body; swallowing capsules of cocaine; using luggage either with fake compartments or everyday objects contained

inside (souvenirs, gifts, toiletries, among others); inserted into the body;¹¹ and cocaine modified so it can be impregnated in clothes or other materials (see McDermott & Power, 2005). Each of these methods imply different infrastructural arrangements to transport the cocaine from sites of production to market. We now turn to a range of examples which further unpack the ephemeral infrastructures of drug smuggling at El Dorado Airport.

In September 2013, the Anti-Narcotics Police at the Airport captured a Canadian citizen trying to smuggle cocaine via a direct flight from Colombia to Canada. Owing to her suspicious behavior the passenger was discovered by the police to be wearing a fake belly made of latex, disguised to look similar to the size and shape of a woman's stomach seven months into the course of pregnancy (figure 1). Two kilos of cocaine were discovered inside the prosthesis. The passenger pretended to be pregnant and to avoid the X-ray controls due to her apparent condition. As narrated by the commander of the Anti-Narcotics Police, the discovery of the fake belly was both the result of routine checks and the cunning of a policewoman. It was revealed that detection such as this was possible due to the profiling at the check-in area, especially by a recently pregnant policewoman. Some stable routines carried out by the police are the frisking of suspicious passengers. When approaching the checkpoint, the Canadian woman excused herself from the frisking due to her pregnancy. Nevertheless, the Colombian policewoman touched her belly and felt it was 'cold'¹²). The police officer also noted the material's strange quality. At this point, the x-rays were enrolled to dissolve the dispute

¹¹ Some extreme forms of this method of smuggling have been reported, with surgical methods employed to implant cocaine under the skin (CIENA, 2017)

¹² Interview with Anti-Narcotics Police station commander, February 2014.

between the passenger and the police. The Canadian woman refused to take the body scan test because of possible damages to her baby. The police in the site decided on a manual search, and the woman was led to a room where the prosthesis – attached to the back with Velcro – was removed and two kilos of cocaine discovered. In a follow-up interview several years later¹³, it was confirmed that police never found either the owners of the cocaine or the makers of the prosthetics. While some police suggested the high craftsmanship in making the prosthesis pointed to local makers and the similarity with previous seizures, others suggested it was just bought online, adding another layer to the mobility of the materials traveling alongside the bodies and the illicit products. A warning was issued to the police personnel in the field to look out for more possible fake bellies full of cocaine. There has not been another case of fake pregnant bellies captured in El Dorado since.

Suitcases appear to be the most common (or the easiest to spot) method used by drug organizations to transport drugs. Between 2014 and 2016 around 66% of the drugs captured in the El Dorado, used suitcases¹⁴. During the final week of February 2016, the Anti-Narcotics Police captured a total of five people trying to smuggle drugs to Europe using the double-bottom method of adapted luggage. According to the police, the interception resulted from profiling the passengers and their luggage, and the use of sniffer dogs.¹⁵ On the same flight, but unknown to each other, two of the people were captured because their suitcases were considered suspicious during the X-ray scan,

¹³ Interview with a CIENA analyst, 2018.

¹⁴ The Colombian Police don't differentiate between double-bottom or other modifications of suitcases and carrying drugs using suitcases without modifications. Statistics after 2017 are less clear on the method of transport.

¹⁵ In police parlance, sniffer dogs are called biosensors.

then retrieved from the conveyor belt and confirmed by sniffer dogs. The bags were taken to the 'reconciliation room' where, in their owners' presence, the cocaine was found. On the route from Bogotá via Amsterdam to Milan, a 46-year-old man and an 18-year-old woman, traveling separately on the same flight, were required to open their hand luggage of similar sports backpacks. The backpacks were found to be stiff, as opposed to the form and materiality of a regular sports bag. After inspection, the police found 1,456 grams of cocaine in the first backpack and 1,225 grams in the second. The third case was reported to have been discovered in the check-in area prior to boarding: sniffer dogs pointed to the luggage of a passenger and after inspection 1.2 kilos of cocaine was found in a double-bottom bag. Such bags are one of the most common transport methods of small quantities of cocaine, but as informed by the example presented previously, the fabrication of such double-bottom suitcases is carried out in different places by different suppliers. While different groups may have a preferred bag maker, they do not hesitate to change the provenance of the bags. The bags are moved from city to city, from the workshops where they are made or modified to the hotels or houses where their new carriers meet them.

Here again, the encounter between this common method of drug transportation and airport security is far from straightforward. The double-bottom bags need to appear as regular bags, but crucially they have to be 'attached' to a seemingly legitimate tourist in order to appear as part of tourist mobilities. The double-bottom bags and the traveler need to pass the inspection of airport security, which depends on the coupling of police expertise and machines. Details such as an inappropriate watch, a worn-out shoe,

anything that doesn't cohere, or the memory of the police in recalling some detail of a previous case can lead to detection.

Compared with the prosthetic stomach, double-bottom suitcases or bags are far more common, and the methods of inspecting suitcases is explicitly written into the inspection manual for training new anti-narcotics police. In such an example, the infrastructure of smuggling acquires temporary stability whereby the design and adaptation of different types of luggage affords smugglers the opportunity to harness the mobilities of tourist infrastructure, namely the transportation of luggage. However, another form of temporary stability appears for the Anti-Narcotics Police when they recognize the materiality of adapted luggage. As we have argued earlier, a key condition of our rendering of ephemeral infrastructure is the constant movement in and out of stability and embeddedness. And in the same vein, smugglers are constantly utilizing new methods of adaptation and disguise to circumvent the knowledge of police. So, where a backpack or suitcase might have been detected another adapted artifact becomes part of the smugglers' arsenal.

In another case at El Dorado Airport police discovered a suitcase made of parts chiefly from processed and transformed cocaine. The cocaine was sufficiently altered to overcome X-ray inspection, where police are looking for suspicious colors or shapes, the standardized luggage sizes as a blueprint to identify suspicious cargo. In this situation, some of the parts of the suitcase were replaced with similar parts made from cocaine. The police seized the case due to a tip-off from an informant, and upon capture, the maker of the suitcases confessed to having fabricated such suitcases for

several different groups¹⁶. The fact these suitcases had successfully been used by several groups of smugglers points to our assertions regarding the temporary stability afforded by licit infrastructures of tourism. Given they were utilized for smuggling quantities of cocaine by these various groups they were embedded within the mobilities of the passengers carrying them, only to lose their temporary stability following the tip-off to the Anti-Narcotics Police. Compared with the transit of vast amounts of licit tourist luggage through the airport which have an ongoing stability, these adapted suitcases are only momentarily embedded (prior to capture in this case).

In December 2018 four people were captured whilst trying to travel to Spain from El Dorado carrying 16 kilos of cocaine divided among themselves and attached to their bodies. The four were traveling on their own but were part of the same group, as their tickets were bought with the same credit card, and travel documents were issued the same day. They accessed the airport at different times and sat apart in the lounge. Alerted by the booking details, police asked for an X-ray inspection, where the cocaine was found adhered to their bodies attached with parcel tape. Although not as infrequent as the ingenuity of prosthetics, capturing people with cocaine attached to their bodies is not a common occurrence.¹⁷ Although frisking is part of the security routine, the capture of people with drugs attached to their bodies is met with some amusement by security officials: “those are easier to spot, you can see that they walk or move funny, just the other day [a named police officer] captured a guy who was walking with his legs wide

¹⁶ Interview with police analyst, March 2018.

¹⁷ This method does not even account for 1% of seizures between 2014 and 2016, far less than the 30% of people captured who have ingested the illicit drugs (CIENA, 2017).

open, you didn't even had to touch him to know he was carrying drugs"¹⁸. Once again, this highlights our argument that the smugglers' infrastructures only achieve their potentiality if successfully embedded, where the materials, bodies, body language, and demeanor hold together as seemingly legitimate actors. While smugglers might attempt to disguise the transport of drugs in suitcases by hiding the characteristic smell using a more powerful scent (such as mixing the cocaine with ground coffee or pouring alcohol inside and outside the luggage), the body language of smugglers is vital to the police's modes of detection.

Based on these snapshots of smuggling activities uncovered by the police at El Dorado Airport, we argue that smugglers attempt to utilize the aeromobilities of the airport infrastructure, engaging with the infrastructural configurations proposed by Martin (2019) and Cohen et.al. (2017), through a process of negotiating embeddedness and interdependency in distinct ways. We can see how a shadow infrastructure is created, that of the technologies of deception demonstrated by the decoy stomach and the double-bottomed luggage. But unlike the singular use of shadow infrastructure seen with light aircraft or narco-submarines the propulsive force of the licit aeromobilities infrastructure potentially enables transnational distribution. It is the process of negotiating these shadow and extant infrastructures that we argue characterizes the ephemeral or short-lived nature of the drug smuggling infrastructure. Upon entering the airport infrastructure, smugglers posing as legitimate travelers, become invisible for a brief period of time by dint of their immersion in the regular flows of passengers. As a result, the stability of these passenger flows affords temporary stability for the

¹⁸ Interviews with police analyst, April 2015 and September 2018.

smugglers for the specific period of time they are within the aeromobilities infrastructure, i.e., checking-in, on-flight, arrival at their destination. However, this stability is short-lived and, decisively, precarious as it co-evolves in relation to the continued presence of the airport security apparatus.

Despite the continuous capture of people at El Dorado, the airport continues to be used as a passage point by drug smugglers. While the smugglers could attempt to circumvent this airport and create a shadow infrastructure, this can only be done at the expense of reconfiguring the entire drug smuggling infrastructure. As an anti-narcotics officer at the airport affirmed in an interview with one of the authors, “those organizations are specialized in transporting using this airport, they know what to tell the people transporting the drugs, which are the best moments, how to behave, where to walk”¹⁹. What is at play is how the infrastructural arrangements developed by the drug smugglers are configured through the use of bodies as infrastructures, luggage and decoys, and attached on a temporary basis to the regimes of passenger aeromobilities.

Conclusion

As with any other infrastructure, drug smugglers’ infrastructures require maintenance and the continuous enrollment of loose and unstable elements. Drug smugglers need to make sure that the infrastructure will hold under pressure; that adapted luggage with double compartments will pass inspection; that a latex prosthetic stomach will not be discovered by X-ray scanners; that the purchasing of tickets will evade airline and police

¹⁹ Interview with anti-narcotics police analyst, June 2017.

scrutiny; that people will not look nervous or too brazen. In this way drug smuggling infrastructures exhibit the need for continual upkeep and development. In this regard one might deduce that both licit and illicit infrastructures exhibit similar forms of maintenance to produce stability. However, whilst the ongoing stability of licit infrastructures depends on such upkeep, the key contrast with the illicit infrastructures associated with drug smuggling is that they are by comparison temporary. The core distinction we make in this paper is that because of the ever-presence of security infrastructures, drug smuggling infrastructures are inevitably short-lived and thus ephemeral, hence our use of the empirical materials from the activities of the law enforcement agencies at El Dorado. Equally, whilst the decentralized nature of drug smuggling has long been recognized in relationship to the centralized configuration of security apparatuses such as those in operation at El Dorado Airport, this paper has offered a new framing of this relationship by identifying the spatial, material, and temporal dimensions of how drug smuggling infrastructures are configured in a short-lived manner. Above all, our use of the term ephemeral is intended to posit the temporality of drug smuggling infrastructure, combined with the socio-material focus from STS and cognate fields. Although drug smuggling has been present within El Dorado since the 1980s, and is likely to continue, the empirical insights from the Airport demonstrate how the ephemeral infrastructure of drug smuggling mobilities coexist with other infrastructures, travelling in the same flows as tourist infrastructures (Walters, 2018), albeit for truncated periods of time in comparison with licit mobilities. These are configurations of interlinked technologies, of a diverse array of actors that facilitate the mobility of drugs, and we suggest that one of the key contributions this paper offers to

drug studies and the wider literature on subversive mobilities and STS's engagement with infrastructure is how the different temporalities of infrastructural stability and embeddedness helps to reconceptualize what is already known about the movement of drugs. By stating that drug smuggling infrastructures have the ability to move in and out of embeddedness, we argue, in part, that the phenomenon rests precisely on arrangements that are ephemeral and do not seek the creation of recognizable routines or standardized practices. As such there are moments of control over the mobility of the drugs, coupled with a large degree of uncertainty. Whilst smugglers might be able to control the initial phase of planning (buying tickets, arranging distribution of the illicit cargo, giving instructions), once the *pasante* enters the infrastructure of the airport – be it with a prosthetic stomach or a double-bottom suitcase – there is a temporary reliance on the infrastructural logic and stability of aeromobilities to successfully distribute the drugs to the next phase of the journey.

In conclusion, this paper has argued for the interpretative possibilities opened-up when combining the theoretical affinities of STS, mobilities studies and infrastructural studies to better understand the mobilities of drug smuggling. We illustrate the contribution such fields can make to the study of drug trafficking networks by foregrounding the ontological shift produced when the infrastructures of drug smugglers are symmetrically analyzed with the infrastructures for the governance and securitization of airports (Adey, 2004). We argue that despite recent research employing network approaches there is still a lack of engagement with the temporalities and materialities of the artefacts that are key to moving cocaine from sites of production to consumption. Ultimately, we define the ephemeral infrastructures of drug smuggling mobilities as temporary

arrangements to transport cocaine by shifting in and out of embeddedness within licit tourist infrastructure, as well as producing invisibility through the creation of small-scale infrastructural arrangements in relation to airport security.

Figure 1: Latex prosthetic stomach (Source - Photo author's own)

References

- Abraham, I., & van Schendel, W. (2005). Introduction, The Making of Illicitness. In I. Abraham & W. van Schendel (Eds.), *Illicit Flows and Criminal Things* (pp. 1–37). Bloomington, IN: Indiana University Press.
- Adey, P. (2004). Surveillance at the airport: Surveilling mobility/mobilising surveillance. *Environment and Planning A*, 36(8), 1365–1380.
<https://doi.org/10.1068/a36159>
- Adey, P. (2006). If Mobility is Everything Then it is Nothing: Towards a Relational Politics of (Im)mobilities. *Mobilities*, 1(1), 75–94.
<https://doi.org/10.1080/17450100500489080>
- Andersson, R. (2015). Hardwiring the frontier? The politics of security technology in Europe's 'fight against illegal migration.' *Security Dialogue*, 47(1), 22–39.
<https://doi.org/10.1177/0967010615606044>
- Associated Press. (2016). 'US agents find major Mexico drug tunnel covered by bin in California.' The Guardian.
<https://www.theguardian.com/world/2016/apr/21/us-agents-find-major-mexico-drugtunnel-covered-by-bin-in-california> (retrieved, 3/12/20)
- Basu, G. (2013). The role of transnational smuggling operations in illicit supply chains. *Journal of Transportation Security*, 6(4), 315–328.
<https://doi.org/10.1007/s12198-013-0118-y>

- Beauchamps, M., Hoijtink, M., Leese, M., Magalhães, B., Weinblum, S., & Wittendorp, S. (2017). Introduction: In M. Leese & S. Wittendorp (Eds.), *Security/Mobility* (pp. 1–14). Manchester: Manchester University Press.
- Beck, S., Forsyth, T., Kohler, P. M., Lahsen, M., & Mahony, M. (2017). The Making of Global Environmental Science and Politics. In U. Felt, R. Fouché, C. A. Miller, & L. Smith-Doerr (Eds.), *Handbook of Science and Technology Studies, Fourth Edition* (pp. 1059–1086). Cambridge, Mass: MIT Press.
- Benítez, G. J., Guerrero-C, J., Arandia, M., Santacruz, M., Cuadros, L. W., & Díaz, J. D. (2017). Voces actuales en el fenómeno de pasantes de drogas ilícitas en Colombia. *Rev. Crim.*, 59(3), 125–139.
- Bess, M. K., & Enciso, F. (2017). At the intersection of mobility, transport, and the drug trade: Identifying ‘drug mobilities.’ *The Journal of Transport History*.
<https://doi.org/10.1177/0022526617725281>
- Birtchnell, T., & Böhme, T. (2020). Supply chains and the mobilities of cargo. In *The Handbook of Research Methods and Applications for Mobilities*. Cheltenham: Edward Elgar Publishing.
- Birtchnell, T., & Urry, J. (2015). The mobilities and post-mobilities of cargo. *Consumption Markets & Culture*, 18(1), 25–38.
<https://doi.org/10.1080/10253866.2014.899214>
- Braun, B., Schindler, S., & Wille, T. (2019). Rethinking agency in International Relations: performativity, performances and actor-networks. *Journal of*

International Relations and Development, 22, 787-807

<https://doi.org/10.1057/s41268-018-0147-z>

Caulkins, J. P., Burnett, H., & Leslie, E. (2009). How illegal drugs enter an island country: insights from interviews with incarcerated smugglers. *Global Crime*, 10(1–2), 66–93. <https://doi.org/10.1080/17440570902782477>

Centro Internacional de Estudios Estratégicos Contra el Narcotráfico. (2017).

Estadísticas-CIENA. Policía Nacional de Colombia.

<https://www.policia.gov.co/centro-estudios-narcotrafico/productos> (retrieved 2/2/21)

Cohen, E., Cohen, S. A., & Li, X. (2017). Subversive mobilities. *Applied Mobilities*, 2(2), 115–133. <https://doi.org/10.1080/23800127.2017.1305217>

Cook, N., & Butz, D. (2016). Mobility justice in the context of disaster. *Mobilities*, 11(3), 400–419. <https://doi.org/10.1080/17450101.2015.1047613>

Cwerner, S., Kesselring, S., & Urry, J. (2009). *Aeromobilities*. London: Routledge. <https://doi.org/10.4324/9780203930564>

Decker, S. H., & Townsend Chapman, M. (2008). *Drug smugglers on Drug Smuggling Lessons from the inside*. Philadelphia, PA: Temple University Press.

Dodge, M., & Kitchin, R. (2004). Flying through code/space: the real virtuality of air travel. *Environment and Planning. A*, 36(2), 195–211. <https://doi.org/10.1068/a3698>

- Dourish, P., & Bell, G. (2007). The infrastructure of experience and the experience of infrastructure: meaning and structure in everyday encounters with space. *Environment and Planning B: Planning and Design*, 34(3), 414–430.
<https://doi.org/10.1068/b32035t>
- Evans, S. W., Leese, M., & Rychnovská, D. (2020). Science, technology, security: Towards critical collaboration. *Social Studies of Science*, 30631272095351–306312720953515. <https://doi.org/10.1177/0306312720953515>
- Fleetwood, J. (2014). *Drug mules: Women in the international cocaine trade*. London: Palgrave Macmillan.
- Gootenberg, P. (2005). Scholars on Drugs: Some Qualitative Trends. *Qualitative Sociology*, 28(4), 479–491. <https://doi.org/10.1007/s11133-005-8369-y>
- Graham, S., & Thrift, N. (2007). Out of Order; Understanding Repair and Maintenance. *Theory, Culture & Society*, 24(3), 1–25.
<https://doi.org/10.1177/0263276407075954>
- Graham, Stephen, & Marvin, S. (2001). *Splintering urbanism: networked infrastructures, technological mobilities and the urban condition*. London: Routledge.
- Guerrero C, J. (2020). *Narcosubmarines: Outlaw Innovation and Maritime Interdiction in the War on Drugs*. Singapore: Springer Singapore.
- Hall, T. (2018). *The Economic Geographies of Organized Crime*. New York, NY: Guilford Press.

- Hannam, K., Sheller, M., & Urry, J. (2006). Editorial: Mobilities, Immobilities and Moorings. *Mobilities*, 1(1), 1–22. <https://doi.org/10.1080/17450100500489189>
- Harvey, S. (2016). *Smuggling: Seven centuries of contraband*. London: Reaktion Books.
- Howe, C., Lockrem, J., Appel, H., Hackett, E., Boyer, D., Hall, R., Schneider-Mayerson, M., Pope, A., Gupta, A., Rodwell, E., Ballester, A., Durbin, T., el-Dahdah, F., Long, E., & Mody, C. (2016). Paradoxical Infrastructures: Ruins, Retrofit, and Risk. *Science Technology and Human Values*, 41(3), 547–565. <https://doi.org/10.1177/0162243915620017>
- Hyysalo, S., Pollock, N., & Williams, R. (2018). Method Matters in the Social Study of Technology: *Science & Technology Studies*, 32(3), 2-25. <https://doi.org/10.23987/sts.65532>
- Jasanoff, S. (2004). *States of knowledge: The co-production of science and the social order*. London: Routledge.
- Kenney, M. (2007). *From Pablo to Osama Trafficking and Terrorist Networks, Government Bureaucracies, and competitive adaptation*. Pennsylvania: Pennsylvania State University Press.
- Kloppenborg, S. (2013). Mapping the Contours of Mobilities Regimes. Air Travel and Drug Smuggling Between the Caribbean and the Netherlands. *Mobilities*, 8(1), 52–69. <https://doi.org/10.1080/17450101.2012.747766>

- Larkin, B. (2013). The politics and poetics of infrastructure. *Annual Review of Anthropology*, 42, 327–343. <https://doi.org/10.1146/annurev-anthro-092412-155522>
- Latour, B. (2005). *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Law, J. (1991). Introduction: Monsters, Machines and Sociotechnical Relations. In J. Law (Ed.), *A Sociology of Monsters: Essays on Power, Technology and Domination* (pp. 1–23). London: Routledge.
- Law, J. (2012). The Materials of STS. In D. Hicks & M. C. Beaudry (Eds.), *The Oxford Handbook of Material Culture Studies* (pp. 173–188). Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199218714.013.0006>
- Leese, M., & Wittendorp, S. (2018). The new mobilities paradigm and critical security studies: exploring common ground. *Mobilities*, 13(2), 171-184
<https://doi.org/10.1080/17450101.2018.1427016>
- Levinson, M. (2016). *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger*. Princeton, NJ: Princeton University Press.
- Lupsha, P. A. (1981). Individual choice, material culture, and organized crime. *Criminology*, 19(1), 3–24. <https://doi.org/10.1111/j.1745-9125.1981.tb00401.x>

- MacKenzie, D., & Wajcman, J. (1999). Introductory Essay: The Social Shaping of Technology. In D. MacKenzie & J. Wajcman (Eds.), *The Social Shaping of Technology* (pp. 3–27). Milton Keynes: Open University Press.
- Martin, C. (2015). Smuggling mobilities: Parasitic relations, and the aporetic openness of the shipping container. In J. Urry, T. Birtchnell, & S. Savitzky (Eds.), *Cargomobilities, Moving Materials in a Global Age* (pp. 65–86). London: Routledge.
- Martin, C. (2019). The socio-material cultures of global crime: artefacts and infrastructures in the context of drug smuggling. In T. Hall & V. Scalia (Eds.), *A Research Agenda for Global Crime* (pp. 147–159). Cheltenham: Edward Elgar Publishing.
- McDermott, S. D., & Power, J. D. (2005). Drug smuggling using clothing impregnated with cocaine. *Journal of Forensic Sciences*, 50(6), 1423–1425.
<https://doi.org/10.1520/JFS2005198>
- Meyer, K., & Parssinen, T. (1998). *Webs of smoke: smugglers, warlords, spies, and the history of the international drug trade*. Lanham, Md.; Oxford: Rowman & Littlefield
- Nordstrom, C. (2007). *Global outlaws: crime, money, and power in the contemporary world*. Berkeley, CA: University of California Press.

Office of Policy and Planning and Office of Internal Affairs, Container Security Division. (2006). *Container Security Initiative: 2006-2011 Strategic Plan*. Washington, DC: U.S. Customs and Border Protection

Pinch, T. J., & Bijker, W. E. (1984). The Social Construction of Facts and Artefacts: or How the Sociology of Science and the Sociology of Technology might Benefit Each Other. *Social Studies of Science*, 14(3), 399–441.
<https://doi.org/10.1177/030631284014003004>

Pooley, C. G. (2017). Connecting historical studies of transport, mobility and migration. *The Journal of Transport History*, 38(2), 251–259.
<https://doi.org/10.1177/0022526617715538>

Reuter, P., & Paoli, L. (2020). How similar are modern criminal syndicates to traditional mafias? *Crime and Justice*, 49(1), 223–287.
<https://doi.org/10.1086/708869>

Salter, M. B. (2004). Passports, Mobility, and Security: How smart can the border be? *International Studies Perspectives*, 5(1), 71–91.
<https://doi.org/10.1111/j.1528-3577.2004.00158.x>

Schouten, P. (2014). Security as controversy. *Security Dialogue*, 45(1), 23–42.
<https://doi.org/10.1177/0967010613515014>

Sheller, M. (2010). Air mobilities on the US–Caribbean border: Open skies and closed gates. *The Communication Review*, 13(4), 269–288.
<https://doi.org/10.1080/10714421.2010.525469>

- Sheller, M., & Urry, J. (2006). The new mobilities paradigm. *Environment and Planning A*, 38(2), 207–226. <https://doi.org/10.1068/a37268>
- Simone, A. (2004). People as Infrastructure: Intersecting Fragments in Johannesburg. *Public Culture*, 16(3), 407–429.
<https://doi.org/10.1215/08992363-16-3-407>
- Star, S. L. (1999). The ethnography of infrastructure. *American Behavioral Scientist*, 43(3), 377–91. <https://doi.org/10.1177/00027649921955326>
- Star, S. L., & Ruhleder, K. (1996). Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces. *Information System Research*, 7(1), 111–134. <https://doi.org/10.1287/isre.7.1.111>
- Thimm, V., & Chaudhuri, M. (2019). Migration as mobility? An intersectional approach. *Applied Mobilities*, 1–16.
<https://doi.org/10.1080/23800127.2019.1573780>
- Tonry, M. H., & Reuter, P. (2020). *Organizing Crime: Mafias, Markets, and Networks*. Chicago, IL: University of Chicago Press.
- Urry, J. (2005). The Complexity Turn. *Theory, Culture & Society*, 22(5), 1–14.
<https://doi.org/10.1177/0263276405057188>.
- Urry, J. (2007). *Mobilities*. London: Polity
- US Customs and Border Protection. (2019). 'Federal Authorities, Local Partners Seize 333 Pounds of Cocaine in Shipping Container.'

<https://www.cbp.gov/newsroom/local-mediarelease/federal-authorities-local-partners-seize-333-pounds-cocaine-shipping> (retrieved 2/2/21)

Valkenburg, G., & Van der Ploeg, I. (2015). Materialities between security and privacy: A constructivist account of airport security scanners. *Security Dialogue*, 46(4), 326–344. <https://doi.org/10.1177/0967010615577855>

Vogel, K. M., Balmer, B., Weiss Evans, S., Kroener, I., Matsumoto, M., & Brian, R. (2017). Knowledge and Security. In U. Felt, R. Fouché, C. A. Miller, & L. Smith-Doerr (Eds.), *The Handbook of Science and Technology Studies* (pp. 973–1001). Cambridge, MA: MIT Press.

Walters, W. (2018). Aviation as deportation infrastructure: airports, planes, and expulsion. *Journal of Ethnic and Migration Studies*, 44(16), 2796–2817. <https://doi.org/10.1080/1369183X.2017.1401517>

Williams, P. (2001). Transnational Criminal Networks. In J. Arquilla & D. Ronfeldt (Eds.), *Networks and Netwars: The Future of Terror, Crime, and Militancy* (pp. 61–96). Santa Monica, CA: RAND Corporation

Xiang, B., & Lindquist, J. (2014). Migration infrastructure. *International Migration Review*, 48(s1), S122–S148. <https://doi.org/10.1111/imre.12141>

